DOCUMENT RESUME

ED 217 371 CS 006 591

AUTHOR Purves, Alan C.
TITLE Overview of the Results of the IEA Studies in Reading and Literature.
PUB DATE Apr 82
NOTE 14p.; Paper presented at the Annual Meeting of the National Council of Teachers of English Spring Conference (1st, Minneapolis, MN, April 15-17, 1982).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; Comparative Analysis; Educational Practices; *Educational Research; *English Instruction; *International Studies; Literature Appreciation; *Outcomes of Education; Reading Instruction; Secondary Education; Secondary School Teachers; *Teaching Styles
IDENTIFIERS *International Assn Evaluation Educ Achievement

ABSTRACT

A summary of the reading and literature studies undertaken by an international voluntary association of educational researchers from various countries is in this paper. The studies' major findings are listed, and certain student attributes--such as sex, socioeconomic status, reading and viewing habits, and parental involvement--are discussed as they relate to student achievement in reading and literature. Also mentioned is a reference to Puritanical overtones in the responses to literature of secondary school students in the United States. The practices of English teachers, assessed through the use of a questionnaire, are classified into teachers who are (1) taste oriented, (2) history oriented, (3) heritage oriented, (4) self-understanding oriented, (5) form oriented, (6) criticism oriented, (7) student oriented, and (8) language oriented. The paper concludes that the results of the studies in reading and literature indicate that several patterns of instruction, learning, and response appear to emerge as outcomes of the curriculum. (AEA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED217371

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Alan C. Purves

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Alan C. Purves
Curriculum Laboratory/University of Illinois at Urbana-Champaign
1210 W. Springfield, Urbana, IL 61801

Overview of the Results of the IEA Studies in Reading and Literature

The International Association for the Evaluation of Educational Achievement (IEA), a voluntary association of educational researchers from a large number of countries, undertook a study of achievement in six subjects: reading, literature, science, civic education, English as a foreign language, and French as a foreign language. The work on developing tests, questionnaires, and analysis began in 1965, and the testing in reading, science, and literature was done in 1970. Each subject study was designed by a committee: Robert Thorndike chaired the reading committee; A. W. Foshay and Alan Purves chaired the literature committee. Fifteen countries participated in the reading study and ten in the literature study. The testing was done at two levels: age fourteen (Population II), and the preuniversity year in secondary school (Population IV); most countries also tested ten year olds (Population I) in reading.

Unlike other countries, the United States did not test the same students in both reading and literature on the one hand and science on the other. In the reading study the students were given a test of comprehension using short passages and multiple-choice questions, a test of reading speed, a brief test of work knowledge, and a questionnaire about background, interests, and opinions. The comprehension tests differed for the three age groups, although there were some common passages.

In literature both age groups were given a multiple-choice comprehension test on two short stories (one common to all students and one of three stories rotated among random thirds of the student group), and a response preference questionnaire designed to elicit their preferred mode of writing or talking about each story. The literature test also included a questionnaire dealing with the

CS006591

students' interest in reading and literature, a general response preference questionnaire, a questionnaire seeking their involvement in what they read, and one dealing with reading preferences and other interests.

Major Findings

1. Girls generally outperform boys in tests of comprehension of literature.
2. Students have difficulty reading non-narrative prose.
3. Many students who do not comprehend a text tend to be concerned with "peripheral" matters such as the author, the text's relation to other texts, and whether they can "identify" with the text.
4. Students have difficulty answering questions dealing with the formal and technical aspects of prose.
5. By the end of secondary school, able students--the ones most likely to take college English courses--have developed a pattern of response to fiction that considers hidden meanings, the content of the text, and the moral implications of the work.
6. Teachers of literature may be divided into a critical, text-oriented group and a personal, reader-oriented group; the former teaching the upper grades, the latter the lower grades.

Student Attributes

The initial regression analyses suggested that sex and socio-economic status determined achievement, particularly in literature. One need not stop with the regressions, however, in one's search for explanation of relative performance, for the regression looks only at linear relationships between variables. A useful supplement may arise from an examination of the two tails of the distribution, to see what differences might distinguish high-performing from low-performing students.

The analyses performed with two groups (Population I and II) will be dis-

cussed together. To take certain fixed characteristics first, one can see that although better readers tend to be girls, the percentage of girls in the low-scoring group rises from elementary to junior high school. The birth order and family size data clearly indicate that poor readers tend to come from large families and to be in the middle of the birth order. The reasons for this finding would appear to have something to do with the amount of opportunity the child has to be with parents and thus the amount of opportunity to develop language skills at home, although they might be attributed to the middle child's seeking to be different from the others.

The reading and viewing habits of the children tend to be supporting evidence for the scores rather than explanatory evidence, in that low-achieving students may have nad limited exposure to books at home and thereby impaired their reading performance. The students with high scores have more to read and take more advantage of that opportunity to read. The two age groups were asked about their television viewing in different ways so that direct comparison is not available. For both age groups it would seem that more poor readers watch little television and that good readers watch a fair amount of television, thus confounding those critics who claim that television watching has a negative effect on reading. If any such effect is to be claimed, it can only be so claimed for younger students.

Another claim that has been made is that parental pressure has a negative effect on achievement. The students were asked a number of questions about their home lives. One first notices that there is generally less parental concern reported by the junior high-school child than there is by the elementary school child. At the same time, however, the parents of low-achieving students appear less interested in their children's school but more active in helping with homework, probably because their children ask for help. It would be hard to

conclude from these findings that parental pressure has a sharply negative effect.

One final comparison of the two groups of students was done for Population II only, an examination of the parents' occupation and the students' expected occupation. As might be expected the poor readers come from blue collar or lower white collar families and the good ones from managerial or professional families. Over half of the good readers (55.6 percent) intend to go into the professions as opposed to 27.1 percent of the poor readers. The good readers tend to aspire beyond their parents' occupation; the poor readers to aspire to their parents' occupation or to be unsure.

These data allow for a number of interpretations. Together with the birth-order differences, they suggest a classic depiction of the age-old and classless importance given to the first-born and the consequent suppression of younger children: only the first child is the object of hope and support in his or her efforts to rise in the world. Amother plausible interpretation is that somehow poor readers are early victims of the system of schooling; as they proceed through school they give up. I am unsure what clear implications these findings bear for instruction, but I suspect the answer lies in parental and pre-school education. It may also lie in the state of society and cultural values.

The other findings have much more clear-cut implications for college and university departments of English, and for secondary schools as well. They form two clear implications.

In the reading test, two passages stood out for their difficulty with 14-year old students: one dealt with a comparison of inductive and deductive reasoning, the second with a scientific passage on water loss in camels. The first of these passages is abstract and uses complex diction, syntax, and paragraph structure. Although it gives valuable information about high-performing students, it is quite difficult for the average and below average.

One suspects that few junior high-school students have been exposed to this type of prose, the prose of the more serious textbook. The second passage is difficult in a different way; it uses a great many numbers and requires a fair amount of figuring. Again this is a kind of prose to which few students of this age are exposed. One might argue that the two passages are "beyond" the students' level of development, but development seems inextricably linked to exposure, so that by not having had opportunity to read these kinds of prose students are deprived the chance to learn to read them with comprehension.

A second way of dividing the test is by item type. There are four kinds. One asks the student to find specific information in the text; one asks for the meaning of the whole passage or large segments; one asks for inferences beyond the information given in the text; and, one asks for analysis of the organization or style of the passage.

The Rasch Model enables one to compare the difficulties for each set of items for each population and the projected difficulty of the set for the other population. Thus, main idea items were relatively easy for Population II and very easy for Population IV. If the Population II students had taken the Population IV test the items would have shown much higher difficulty. What is noteworthy about this analysis is the inordinate difficulty of the rhetoric items for Population II (.837); in fact they show more difficulty than the main idea items would have shown had those students taken the Population IV test (.780). If one looks at this item type for Population IV, it falls within an acceptable range of difficulty. One can draw from this finding the inference that matters of rhetoric are part of the high-school curriculum but not of the junior-high curriculum. Yet this type of item is frequently found in tests at the junior high-school level. As is the case of abstract prose, these students seem not to be given the chance to learn a skill.

Since the reading data showed an important effect of item type, it was thought worth seeing if the same were true of the literature test. The items had been divided into comprehension and interpretation items, but for "The Sea" there were among those interpretation items some dealing with formal matters, particularly imagery and point-of-view. In order to see whether these items or in fact either of the larger groups of items proved particularly difficult, an analysis of the poorest performing students (less than one standard deviation below the mean) was performed. Clearly the interpretation items in general were somewhat more difficult for these students than were the comprehensive items; the form questions on "The Sea" were even more difficult. Again one may well suspect lack of exposure to a type of question.

Opportunity to learn is not as clearly apparent as a factor in literature achievement as it is in reading, but it appears to exist nonetheless.

Findings two and three together suggest that many students have difficulty reading non-narrative texts and that when they have difficulty they do not know how to "get in" to the text. It would appear that students have had little exposure to certain kinds of texts and to strategies for reading texts with comprehension. They appear not to have much exposure to metaphoric texts nor to texts that have other than narrative structure. If one looks at secondary school anthologies one tends to see a preponderance of narratives that are either realistic or naturalistic in their subject matter of their uses of language.

The lack of a "way in" to the text appears in the frequency with which less able readers select responses dealing with the genre and background of the story, with its connection to their lives, and to such matters as the relation of form and content, the language of the text, and whether it is well written. They reject questions of hidden meaning, character motivation, theme, organization, and emotional impact. Achievement, then, is accompanied by a pattern of response

that goes into the meaning or significance of the work and deals with emotion and particular implications of the work. Without understanding, there are a series of responses that scratch at the surface of the work as if the reader were trying to find a way in. Students who are in the middle seem to have found a way into the surface of the text but not to its large themes, issues, and implications. One sees a pattern of response that shifts with comprehension as if the better one understands a text, the further one is able to consider it.

The Responses of Secondary School Students

The findings that students have difficulty answering questions dealing with rhetoric and form and that their responses to fiction center upon meaning, symbol, and moral rather than on formal or stylistic matters suggest a kind of monotony in the secondary school curriculum.

One finds that there is a fairly persistent pattern of response linking the search for a hidden meaning to a concern with generalized theme, and to the lesson to be learned, and those two to each other. A sizeable group of American high-school students chooses this symbolic, thematic, moralistic response. It would appear that they do so consistently across selections, and that this pattern of response is only partially modified by the particular selection the students read: if it is difficult like "The Sea," some may be concerned with surface meaning; if it is direct and emotional like "The Use of Force," some may be concerned with their emotional reaction. The moralistic interpretive pattern is the dominant pattern of American high-school students.

In order to see whether students using this pattern could be otherwise identified, we created an artificial score based on the number of times the three questions were selected. A student could select them from never to three times apiece for a score of from 0 to 9. This score was then correlated with selected predictors with the following results. It would appear that high-

achieving middle-class girls tend towards this pattern, but most especially that it is the pattern of students who score well on the achievement measure. In fact, over a third of the top-scoring students choose five or more of the questions. One can go further, then; the moralistic interpretive pattern is the dominant pattern of high-achieving American high-school students.

In this reexamination of the response patterns of secondary-school students in the United States, we have found first that there is an "academic" response to literature that appears to be independent of the selection read and that accompanies good comprehension of the selection. Students apparently learn to read fiction and simultaneously to acquire a response set that concerns itself with thematic interpretation rather than literary analysis or literary history. There is an affective edge to this pattern, and there is somewhat an analytic edge. We have found further that this pattern becomes sharper as students progress through secondary school and that the affective edge is linked to whether or not the student likes this selection. The pattern is further linked to sex and socio-economic status.

The study, then, raises more sharply the probability that responses to literature are learned. It also raises the next question: are these the responses that we want children to learn? Without answering that question, I would argue that the United States pattern is clearly consonant with our traditions of moral criticism and hermeneutics. Clearly not aesthetic, the pattern seems a vestige of the Puritan heritage. One may raise as a final question how long that heritage will remain.

The Practices of English Teachers

As a part of the general purpose of examining the achievement of students, the IEA studies included a fairly extensive questionnaire directed to the teachers. The teachers who responded were not necessarily the actual teachers of the

students, but all of the teachers of the subject in the students' school.

In one analysis of the questionnaire the schools at Population II and IV were divided into three groups: those placed more than one standard deviation below the mean of school mean scores in reading; those between one standard deviation below and one standard deviation above the mean; and those more than one standard deviation above the mean. For each of these three groups the mean values for teachers' responses to certain questions were determined, and trends of difference were noted.

The trends indicate a fairly clear relationship between a style of instruction and student performance. At both age levels teachers in low-achieving schools use more objective tests, see textbooks as important determinants of what they do, use more printed drill, more individualized reading instruction, and more oral reading. They tend to require less writing and lecture less. In junior high schools, they tend to use more programed and more audio-visual material and less homework, small group work, field trips, and questioning. In senior high school, too, they appear more bound to external examination and standardized tests. The only difference in direction occurs with respect to homework, perhaps because more of the work in low-achieving junior high schools is done in class. In sum, the teachers in low-achieving schools appear to use more "busywork" and less work that allows for individual expression. They tend to do those things that keep the students occupied individually and keep them quiet.

Another part of the teacher questionnaire asked teachers of literature to rank in order of importance a set of eight goals of instruction in literature. When one looks at the relationship between goals and other teacher characteristics, one finds a few patterns:

Taste-oriented teachers. Teachers who favor improving students' taste appear to be older, to have a degree in English, and to be more experienced. They tend

to assign projects and term papers, but not to use textbooks, standardized tests, drills, or within-class grouping. They do use small-group work.

History-oriented teachers. This group appears to be the one that keeps up most significantly with the field. Curiously it tends not to assign histories to the students.

Heritage-oriented teachers. These teachers again are older and more experienced and tend to use textbooks less frequently than others. Like the taste-oriented teachers they may reflect an approach to literature characteristic of their own teachers.

Self-understanding-oriented teachers. These teachers are not necessarily teaching their speciality nor are they interested in it; thus their preference for the goal may come from a general educational bias, rather than one specific to literature instruction. It is odd that the group tends to use standardized tests, follow a syllabus, and lecture, but not use small-groups, audio-visual material, or free reading in class. This pattern of practice would seem less "student-centered" than many.

Form-oriented teachers. The teachers who lean towards this goal are younger, less-experienced, than average. They tend to be members of a subject-matter organization. That their choice of goal reflects the recency of their training seems a clear possibility.

Criticism-oriented teachers. This group is also young and relatively inexperienced. In class these teachers tend to assess students with objective tests and homework and to use textbooks. They also tend to group their students and to use oral work more than other teachers and to encourage the reading of biographies of authors. Again the pattern may reflect recent training.

Student-oriented teachers. This group appears not to have had training in literature but to make up for it by hard work in preparation and marking. These

teachers have had training in reading and use individualized instruction.

Language-oriented teachers. This group also spends a fair amount of time preparing for class but does not read journals. These teachers rely on projects and term papers less frequently than do others and do not have a class library.

The teachers were also asked to rate each of the twenty questions of the response preference measure on a four-point scale from "trivial" to "very important." The results of this analysis indicate that there are two groups, one favoring an impersonal formal approach not unlike that of the "New Critics." Certainly it has all the marks of academic text-centered criticism. The second group favors questions relating to the life of the reader: whether the reader finds a connection to the work, whether the work resembles the reader's perception of the world, the lesson of the work, the emotions aroused by the work and its success in involving the reader, and whether the work is serious and significant.

If teachers rank in the first group they tend to use essay tests rather than objective tests, to place a priority on the students' later needs, and to use textbooks and lectures but not field trips. This would appear to be an academic approach. If teachers rank in the second, they tend to value projects, be concerned for the demands of the next grade, and use audio-visual materials. They would seem, then, to be somewhat more student-centered for they reject essays and lectures and standardized tests.

Conclusion

Are United States teachers and students doing well? Can they do better? Certainly by international standards United States students perform creditably on tests of reading comprehension and understanding of literature. In fact, one may say that the United States system has worked remarkably well. A greater percentage of the age group finishes secondary school than in any other country, and the reading level of that group is fairly high. The best students do as

well as, if not better than, the best students in other developed countries. For this, schools, teachers, and students in the United States deserve a pat on the back.

Unfortunately, however, many students still do not perform well on these tests. The analysis indicates that their failure is related to a number of factors, many of them related to a lack of opportunity to learn: to be exposed to materials to read, to be provided with an environment full of adult language and stimulating reading materials, to be provided with incentives to read and to perform well in school, and to be provided with practice in some of the specific skills required by standardized tests of reading comprehension. One may attack those tests, but there is sufficient evidence that they are valid in that they call for close attention to the text, not only its content, but its form. It is attention to form that the low-achieving students are denied.

These student also tend to be in schools where the teachers follow a line of least resistance. The teachers use a lot of drill and in-class work; they require little homework and little writing. Although the teachers are using individualized reading programs, one suspects that the individualization is on the basis of skill rather than interest. There would seem to be little in the classroom to stimulate these students to read more and to read more critically. The focus appears to be on decoding and "busywork." Perhaps the students are "unmanageable" and the teacher can do little else, but one wonders whether there is not a failure of the imagination on the part of these teachers.

On the basis of these data, one might conclude that poor students are treated poorly. Little is done in school to compensate for the lack of language-rich environment at home. The school is dull and the students end up as dullards.

When one turns to response to literature, one finds a clear indication that patterns of response are learned in secondary school. If they are learned, they

appear to have been taught, if not as a conscious part of the curriculum, at least as a part of a "hidden curriculum." Able students pick up the pattern and tend to apply it rigorously to almost any text they read. Less able students appear to flounder when they approach a text, as if they are looking for a way to make it their own. Teachers of less able students seem to raise questions that help students get into the text, but perhaps they do not ask the questions devoted to understanding. A cynic might even say that United States teachers operate on the principle: "Teach the bright ones to be clever and the dumb ones to be honest."

On the other hand, it may well be that teachers are simply following the cues of their students and reinforcing a set of natural tendencies; whatever the explanation, it appears clear that in reading and in response to literature, there is congruity between teacher and student. Teachers of able students appear to encourage students to examine what they read and to read the style as well as the content; teachers of less able students appear to remain on the surface and to explore personal connections between reader and text. Whether what teachers and students do is what they should do remains, to me, somewhat of an open question.

In sum, then, this analysis has indicated that there are indeed patterns of instruction, patterns of learning, and patterns of response that appear to emerge as outcomes of the curriculum in reading and literature. Schools indeed do make a difference, particularly when these schools support (either positively or negatively) the home. Whether the patterns that emerge are the patterns that teachers, curriculum planners, and the public want should be the subject of debate.